



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,115	07/18/2003	Michel John Arthur Groux	3712036-00486	1635
29157	7590	05/14/2010		
K&L Gates LLP P.O. Box 1135 CHICAGO, IL 60690			EXAMINER	
			CHAWLA, JYOTI	
			ART UNIT	PAPER NUMBER
			1781	
NOTIFICATION DATE		DELIVERY MODE		
05/14/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[chicago.patents@klgates.com](mailto:chicago.patents@klgates.com)

<b>Office Action Summary</b>	<b>Application No.</b> 10/622,115	<b>Applicant(s)</b> GROUX ET AL.
	<b>Examiner</b> JYOTI CHAWLA	<b>Art Unit</b> 1781

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 February 2010.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-4, 9-12 and 14-17 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,3,4,9-12 and 14-17 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

Applicant's submission filed on February 2, 2010 has been entered. Applicant has amended claims 1 and 12 and cancelled claims 5-8. Claims 1, 3-4, 9-12 and 14-17 remain pending and are examined in the application.

***Claim Objections***

Claim 9 is objected to because of the following informalities: claim recites the proportions without qualifying that the proportions are determined "by weight", as indicated in the independent claim 1. Appropriate correction is required.

Claim 14 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In the instant case the limitations recited in dependent claim 14 are already part of the parent claim 12. Appropriate correction is required.

***Claim Rejections - 35 USC § 112 (First paragraph)***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejection of claims 1, 3-12 and 14-17 under 35 U.S.C. 112, first paragraph, for failing to comply with the enablement requirement "the milk product is room temperature stable for at least one month and does not need to be cooled to provide the foamed composition," has been withdrawn based on applicant's amendment to latest claims 1 and 12 (received 2/2/2010).

***Claim Rejections - 35 USC § 112 (Second paragraph)***

Art Unit: 1781

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejection of claims 1, 3-12 and 14-17 under 35 U.S.C. 112, second paragraph, for being indefinite for failing to particularly point out and distinctly claim the subject matter have been withdrawn based on applicant's amendment to latest claims 1 and 12  
(received 2/2/2010).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

(A) Claims 1, 3-4, 9-11, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petricca (US 4107343) in view of the combination of Dictionary of Food ingredients by Igoe et al, hereinafter, Dictionary of Food Ingredients, and Staackmann et al (US 3,519,440), hereinafter Staackmann.

Regarding claim 1, Petricca teaches a product, which may be a milk product (Column 4, lines 61-63) which is "whippable homogenized emulsion comprising water fat sweetener, dispersible protein, thickener, buffer and emulsifier" (Column 1, lines 30-34). Whippable product of Petricca comprises about 20-30% fat by weight (see Column 1,

Art Unit: 1781

lines 41-43), which falls in the claimed range of 0 to 40% fat by weight. Regarding the limitation of 5% to 23% non-fat solids by weight, Petricca teaches of 0.5 to 2.5 and up to 4% dispersible protein i.e., sodium caseinate, which is a non-fat solid and sucrose 7-20% (see column 1, lines 40-45) which are both non-fat solids and their amount falls in the claimed range 5-23% (Also see Petricca tables I and II). Petricca teaches of including 0.1 to 0.75% by weight of thickeners (i.e., stabilizers), such as, microcrystalline cellulose and carboxymethyl cellulose combination (Column 1, lines 44, 56-59 and Column 3, lines 5-15). Regarding water Petricca discloses 45-60% water (Column 1, lines 42-44) as instantly claimed.

Petricca discloses of 0.75-2.5% emulsifiers (for example see Petricca Column 1, lines 44-46). Regarding specific emulsifiers Petricca discloses a whippable composition comprising 0.25 to 2.5% propylene glycol monostearate (Column 2, lines 35-40, TABLE II), which falls in the recited range 0.3 to 3% propylene glycol monostearate by weight for claim 1. Petricca also includes minor amounts of other emulsifiers including ethoxylated sorbitan esters (a class of emulsifiers known as polysorbates, such as, polysorbate 60 and polysorbate 80) and fatty acid esters of sorbitan (a class of esters which includes sorbitan monostearate, sorbitan tristearate etc), and provides specific amounts for a fatty sorbitan monostearate in 0.05 to 0.25 % by weight (see e.g., Column 1, lines 49-52 and Column 3, lines 59-60). Petricca also discloses that emulsifying composition having fatty acid moiety in polyglycerol ester can be "one or more even numbered C<sub>12-22</sub> saturated or unsaturated monocarboxylic acid" (see Column 3, lines 30-35) and that "mono and diglycerides may also be utilized in an attempt to reduce whipping time for the emulsion without affecting the stability" (Column 3, lines 63-66).

i) Regarding the limitations of "providing at room temperature, either by shaking or with a foaming device, a foamed composition" and "the milk product is not cooled below room temperature to provide the foamed composition", as recited in amended claim 1, Petricca discloses "such emulsion being substantially stable against separation and/or gelation for at least about 1 year at room temperature under aseptic conditions and

Art Unit: 1781

whippable in the temperature range of 40° to 100° F. to at least about 200% overrun" (Column 1, lines 52-56). Petricca further teaches that the product can be whipped at 70° F (See Column 6, lines 38-50, especially lines 44 and 50), which includes the recited limitations of claim 1.

ii) Regarding the limitation of "a foamed composition for beverages" limitation is an intended use of the composition and the intended use does not determine the patentability of the composition. Thus, the limitation is not positively claimed. However, even if the limitation is positively claimed, it would not have defined over the prior art as Petricca teaches of "pourable edible whippable homogenized emulsion comprising water fat sweetener, dispersible protein, thickener, buffer and emulsifier" (Column 1, lines 30-34) "for food topping" (Column 1, lines 14-15). Furthermore, whipped toppings are well known in the beverage industry with beverages such as hot chocolates. In addition, Petricca discloses similar components and it would have been obvious to one of ordinary skill in the art that whippable composition as disclosed by Petricca will function as a beverage foaming milk product as claimed.

iii) Regarding the limitation of high temperature processing as recited in claim 1, it is noted that it is a process limitation and "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In the instant case it is noted that high temperature processing of milk products was well known. Petricca teaches of sterilization (Petricca Column 2, lines 55-60 and Column 4, lines 28-31).

iv) Regarding the limitation of emulsifiers including 0.005 to 0.15% sorbitan tristearate by weight, as recited in claim 1, Petricca teaches of including propylene

Art Unit: 1781

glycol monostearate in the claimed range of the applicant (Column 2, lines 35-40, TABLE II) as discussed above. Petricca also teaches of minor amounts of other emulsifiers including ethoxylated sorbitan esters (a class of emulsifiers known as polysorbates, such as, polysorbate 60 and polysorbate 80) and fatty acid esters of sorbitan (a class of esters which includes sorbitan monostearate, sorbitan tristearate etc), and provides specific amounts for a fatty sorbitan monostearate in 0.05 to 0.25 % by weight (Column 1, lines 49-52 and Column 3, lines 59-60). However, Petricca does not specifically teach that fatty acid ester of sorbitan is sorbitan tristearate and is added to whippable composition in an amount of 0.005 to 0.15% by weight of the composition. However, food products, such as creamers, coffee whiteners and whippable toppings etc., which utilize fatty acid esters of sorbitan, including polyoxyethylene sorbitan tristearate (i.e., sorbitan tristearate and by trade names of Polysorbate 65 and Span 65) and polyoxyethylene sorbitan monooleate Polysorbate 80, as emulsifiers, were known in the art at the time of the invention. Sorbitan tristearate is a non-ionic surfactant (emulsifier) which is dispersible in fat, oil and water and was known in the art of food at the time of the invention as disclosed by Dictionary of Food Ingredients, page 111. Regarding the specific use and amount of sorbitan tristearate, Dictionary of food ingredients discloses that sorbitan tristearate is added to foods, such as, frozen desserts, cakes and coffee whiteners; frequently used with sorbitan monostearate or mono and diglycerides (other emulsifiers) typically in amounts 0.1 to 0.4%, which includes applicants' recited amount of 0.005 to 0.15% by weight. Thus, one of ordinary skill in the art had knowledge of the following

- fatty acid esters of sorbitan such as sorbitan monostearate and mono and diglycerides were known to be added to whippable or whipped milk compositions as emulsifiers in amounts that fall in the recited range of the applicant (Petricca, Column 1, lines 49-52 and Column 3, lines 59-65), in order to achieve optimal emulsification of fat in the whippable composition while reducing the whipping time.
- Petricca makes stable emulsion as claimed, and non-ionic emulsifying compound disclosed by Petricca (sorbitan monostearate) can be added amounts in

Art Unit: 1781

applicants' recited range along with propylene glycol monostearate and other emulsifiers (Petricca Column 3) to obtain a stable emulsion that can be stored and be foamed at room temperature as recited in claims.

- Sorbitan tristearate is a fatty acid ester of sorbitan, which is a non-ionic surfactant which is dispersible in fat, oil and water and is added to beverage whiteners in 0.1 to 0.4% frequently in combinations with other emulsifiers (Dictionary of Food ingredients, page 111).

Further it is noted that compounds sorbitan monostearate (Petricca) and sorbitan tristearate (Dictionary of Food Ingredients) are both fatty acid esters of sorbitan that are safe to use in foods and are both are non-ionic surfactants or emulsifiers having the recommended usage amount in the claimed range of the applicant. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that sorbitan monostearate (Petricca) and sorbitan tristearate (Dictionary of Food Ingredients) will function similarly when added to a whippable composition, i.e., would be regarded as functional equivalents. Therefore, it would have been matter of routine determination for one of ordinary skill in the art at the time the invention was made to modify Petricca in view of Dictionary of Food Ingredients and substitute art recognized functional equivalent of a fatty acid ester of sorbitan (i.e., sorbitan monostearate) for another (i.e., sorbitan tristearate) in the whippable product as disclosed by Petricca at least based on which ester of sorbitan was more effective as an emulsifier, more affordable and more easily available at the time the invention was made. The Courts have held that the selection of a known material, which is based upon its suitability for the intended use, is within the ambit of one of ordinary skill in the art. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) (see MPEP § 2144.07).

v) Petricca discloses that emulsifying composition having fatty acid moiety in polyglycerol ester can be "one or more even numbered C<sub>12-22</sub> saturated or unsaturated monocarboxylic acid" (see Column 3, lines30-35) and that "mono and diglycerides may also be utilized in an attempt to reduce whipping time for the emulsion without affecting

Art Unit: 1781

the stability" (Column 3, lines 63-66). However, Petricca does not specifically teach that the monoglycerides are unsaturated monoglyceride in the amount of 0.005 to 0.15% by weight of the composition, as recited in the independent claims 1. However, Regarding the selection of emulsifiers Staackmann discloses from the group consisting of propylene glycol monostearate (Column 3, lines 48-68), and fatty acid glycerides obtained from various fatty acids including unsaturated fatty acids, such as oleic, palmitoleic, myristoleic etc (See Staackmann Column 3, lines 3-12, 30-35 and 48-68) i.e., unsaturated monoglycerides and combinations thereof in the amount of 0.1% (Column 5, composition A), which falls within 0.005% to 0.15% unsaturated monoglyceride as recited. Thus, one of ordinary skill in the art had knowledge of the following

- monoglycerides of fatty acids, were known to be added to whippable or whipped compositions to reduce the whipping time without affecting the stability (Petricca, Column 3, lines 63-65)
- fatty acids known to be added to whippable or whipped milk compositions as emulsifiers can be saturated or unsaturated fatty acids (Staackmann, Column 3, lines 48-68), in order to achieve optimal emulsification of fat in the whippable milk composition.

Since Petricca and Staackmann both make stable emulsions, as claimed, it would be obvious that the emulsifiers function similarly, i.e., would be regarded as functional equivalents. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Petricca in view of Staackmann and substitute one art recognized functional equivalent (i.e., monoglyceride of fatty acid) for another (i.e., monoglyceride of unsaturated fatty acid) in the whippable product as disclosed by Petricca at least based on which emulsifying agents were more easily available and affordable at the time the invention was made. The Courts have held that the selection of a known material, which is based upon its suitability for the intended use, is within the ambit of one of ordinary skill in the art. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) (see MPEP § 2144.07).

Art Unit: 1781

Regarding claim 3, Petricca teaches of stabilizers or thickeners and discloses "It is preferred that the thickener be a major proportion of microcrystalline cellulose and a minor amount of carboxymethyl cellulose" (Column 1, lines 57-59). Regarding the amount of thickener or stabilizer, Petricca discloses 0.1 to 0.75% thickener (Column 1, lines 43-45), which falls in the recited range of the applicant.

Regarding claim 4, Petricca teaches of microcrystalline cellulose and carboxymethyl cellulose combination as thickener (i.e., a stabilizer) (Column 1, lines 57-59). Petricca discloses the use of hydrocolloids in the milk composition, including guar, gum arabic, locust bean, acacia, tragacanth, carrageenan, xanthan, ghatti, agar and karaya (See Column 3, lines 10-15), but the reference is silent about adding algin or sodium salt of algin as a stabilizer in the milk composition. However, sodium alginate is well known in the art as a thickening agent/ stabilizer for emulsions and works in a manner that is similar to the hydrocolloids disclosed by Petricca. For example, Staackmann teaches a milk product comprising sodium alginate (algin) (Column 4, lines 28-34) in the recited range of 0.05% to 0.1%. Thus, addition of alginate in the recited amount in emulsion type milk products was known at the time of the invention for the purpose of stabilizing the emulsion. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute one art recognized functional equivalent (i.e., gums and hydrocolloids of Petricca) for another (i.e., sodium alginate) in the milk product as disclosed by Petricca, depending on which stabilizing agents were more available and affordable at the time the invention was made. The Courts have held that the selection of a known material, which is based upon its suitability for the intended use, is within the ambit of one of ordinary skill in the art. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) (see MPEP § 2144.07).

Regarding claim 9, Petricca teaches a whippable product comprising about 20-30% fat by weight (see Column 1, lines 41-43), which falls in the claimed range of 25% to 40% fat by weight. Petricca discloses a whippable composition comprising 0.25 to 2.5% propylene glycol monostearate (Column 2, lines 35-40, TABLE II), which falls in the

Art Unit: 1781

recited range of 2.4 to 3% propylene glycol monostearate by weight for claim 9. The limitations of 0.1 to 0.15% by weight of unsaturated monoglyceride and sodium alginate as recited in claim 9 have already been discussed as part of claim 1(see point (v) above) and claim 4 respectively. Thus claim 9 is rejected for the same reasons as discussed above regarding claims 1 and 4.

Regarding claim 10, Petricca teaches that the fat is vegetable or animal origin and includes examples of vegetable and animal fats (See Petricca Column 3, lines 1-6), which include the limitation of fats as claimed. Staackmann also teaches that fats can be dairy or non-dairy fats, or a mixture thereof (Column 2, lines 47-65).

Regarding claim 11, Petricca teaches sucrose, which is a carbohydrate (See Column 2, Table I), as claimed. For colors and flavors see examples and details in Column 3-4 of Petricca). Further, Staackmann teaches a milk product of claim 1, further comprising one or more of carbohydrates , i.e., starches (column 4, lines 23-25), mineral salts, colorants, or flavorings (Column 3, lines 1-15 and Columns 5-6 Compositions A-D), as recited.

Regarding claim 15, Petricca teaches of a foam that is stable for at least 10 minutes after foaming using a foaming device where Petricca stores whipped composition at room temperature and at 40 °F for 4-8 hours and discloses that "where the product should not excessive air coalescence when observed through a cross section and should not exhibit any substantial decrease in volume" which includes applicant's recited time for stability. Further, Staackmann teaches a process for producing a foam that is stable for at least 10 minutes which comprises forming a milk product by the method of claim 12 and forming a foam from the milk product by shaking or by using a foaming device (Column 1, line 68 to Column 2, line 24).

Regarding claim 17, Petricca teaches of whippable composition which provides stable foam as discussed earlier regarding claim 15. Whippable composition of Petricca may

Art Unit: 1781

include colors such as carotenes (see e.g., Column 4, lines 5-12) which will affect the color of the whipped product, however, it would have been a matter of routine determination for one of ordinary skill in the art at the time of the invention to utilize no coloring matter to create a white topping or to include white coloring matter to impart white color to the whippable or whipped composition. Changing the color of a food product based on desired appearance of the whipped product does not lend patentable distinction to claims where the composition was known.

Further regarding claim 17, Petricca also does not teach dispensing from an aerosol can, however, Staackmann teaches a spray can (i.e., aerosol container) that contains the milk product of claim 1 and is capable of dispensing the product as a stable foam (Column 1, lines 68-72 and Column 2, lines 7-10). Aerosol cans were known to be used for dispersal of whipped products at the time of the invention. Therefore, it would have been a matter of routine determination for one of ordinary skill in the art at the time of the invention to modify Petricca in view of Staackmann and utilize the foaming device as taught by Staackmann in order to dispense a foamy milk product as instantly claimed. One of ordinary skill would have been motivated to do so at least for the purpose of creating a whippable product that is readily dispersible as an aerated or whipped product for convenience to the consumer.

(B) Claims 12, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petricca (US 4107343) in view of the combination of Dictionary of Food ingredients (Page 111), Staackmann (US 3,519,440), further in view of Anderson et al (US 4888194), hereinafter Anderson.

Regarding claim 12, Petricca teaches of a method of making a sterilized and homogenized whippable emulsion comprising adding stabilizers, sweeteners, protein and milk components and flavors, emulsifiers and fats as claimed. Regarding the limitation of milk product Petricca teaches that the whippable product may comprise sodium caseinate (see Column 1, lines 50-53 and Tables I and II), which is salt of casein, i.e., milk protein. Petricca further teaches that although preferred sweetener is

Art Unit: 1781

sucrose, other nutritive sweeteners including lactose (i.e., milk sugar) can be used (Column 3, lines 17-24). Petricca also teaches of vegetable or animal sources of fat in the composition (Column 3, lines 3-4). Petricca also teaches of addition of milk to the composition prior to whipping (See Column 4, lines 61-63) i.e., Petricca discloses of a whippable milk product

The limitations of specific emulsifiers and composition and properties as recited in claim 12 are the same as recited in claim 1. Thus, composition of claim 12 and its resulting whippability and stability properties are rejected for the same reasons as discussed above regarding claim 1.

Regarding the process of making a whippable milk product of claim 12, Petricca teaches a method of making a whippable emulsion comprising adding stabilizers, sweeteners, protein and milk components and flavors and water etc., to which the emulsifiers are added and then fats are added. Thereafter the mixture is agitated and sterilized and cooled and aseptically homogenized (See Petricca Column 2, lines 45-64). Regarding the limitation of high temperature processing Petricca teaches of sterilization (Petricca Column 2, lines 55-60), as claimed. Thus, Petricca teaches the addition of fats after the addition of emulsifiers as instantly claimed. Regarding the order of steps applicants' are referred to MPEP 2144.04 [R-1] IV where it is stated that selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results.

Petricca is silent about the limitations of adding the emulsifiers to skim milk and then adding cream as a source of fat to the emulsion (lines 4-7 of claim 12 as recited). However, utilizing various dairy products, such as skim milk and cream in making a milk product was known at the time of the invention. Also addition of emulsifiers, additives and dry ingredients to a dairy product and forming an emulsion before adding more dairy product was also known at the time of the invention. For example, Anderson teaches a process of making a shelf stable aseptic dairy product which is capable of forming stable foam upon whipping (See Anderson, Column 2, lines 35-40). Anderson's dairy composition may include dairy cream "in combination with

Art Unit: 1781

whole or skim milk or milk solids in any proportions such that the desired butterfat content results" (Anderson, Column 3, lines 33-36). Regarding the process of making a whippable dairy product, Anderson also teaches that emulsifier is added to a portion of the cream (or dairy ingredient, such as skim milk) along with other ingredients and mixed and heated to ensure that the dry blend is completely dissolved. The mixture is then added to the remaining portion of cream and other additives added at this time with thorough mixing. The mixture is cooled and after cooling, the mixture is subjected to UHT processing (See Anderson, Column 6, lines 21-45 and lines 46-68).

Thus, process steps as recited in claim 12, including

- adding fats after the addition of emulsifiers in a process of making a room temperature stable whippable milk product was known in the art at the time of the invention (Petricca, Column 2, lines 45-65 and column 4, lines 45-50).
- Also the process of making a whippable dairy product where choosing a combination of dairy ingredients such as, skim milk, milk, milk solids and cream at least based on the availability and to achieve a desired fat content was known at the time of the invention (Anderson).
- Process for making a whippable dairy product where step of addition of emulsifiers to a part of dairy product to form an emulsion before adding the entire dairy component to the emulsion was well known in the art at the time of the invention (Anderson).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Petricca and utilize a dairy ingredient, such as skim milk to mix with emulsifiers and other dry ingredients and blend to form an emulsion before adding the dairy based fat ingredient, such as cream as taught by Anderson in the process of making a stable whippable milk product. One of ordinary skill in the art would have been motivated to modify Petricca and include one or more milk based ingredients, such as skim milk, milk, milk solids and cream in any proportions, at least for the purpose of achieving a desired fat content in the whippable milk product (Anderson, Column 3, lines 33-36). Further it is noted that new recipes for food involving the addition of common ingredients do not amount to invention merely because the coaction or

cooperative relationship between the ingredients which produces new, unexpected, and useful function. In re Levin, 84 USPQ 232.

Regarding claim 14, Petricca discloses that it is preferred that the thickener (i.e., a stabilizer) comprises of microcrystalline cellulose and carboxymethyl cellulose (Column 1, lines 57-59), as instantly claimed.

Regarding claim 16, Petricca teaches of a foam that is stable for at least 10 minutes after foaming using a foaming device where Petricca stores whipped composition at room temperature and at 40 F for 4-8 hours and discloses that “where the product should not excessive air coalescence when observed through a cross section and should not exhibit any substantial decrease in volume” which includes applicant's recited time for stability. Further, Staackmann teaches a process for producing foam that is stable for at least 10 minutes which comprises forming a milk product by the method of claim 12 and forming foam from the milk product by shaking or by using a foaming device (Column 1, line 68 to Column 2, line 24).

#### ***Response to Arguments***

Applicant's arguments with respect to amended claims 1, 3-4, 9-12 and 14-17 filed 2/20/2010 have been fully considered but are moot in view of the new ground(s) of rejection necessitated by applicant's amendment to independent claims 1 and 12.

Applicant's arguments regarding Petricca not teaching a milk product is still relevant and is addressed below.

Applicants remarks regarding Petricca teaching a non-milk emulsion (Remarks, page 6, last paragraph) and applicants' other argument is that “Petricca teaches essentially a non-dairy food product, which not only teaches away from Staackmann, but also away from the present claims, which are directed to a milk product” (Remarks, page 7, lines 6-8) have been fully considered but have not been found persuasive. In response applicant is referred to Petricca Column 3, line 1 to Column 4, line 63, and also the

Art Unit: 1781

rejection of claims 1 and 12 above where it is disclosed that composition includes milk components and can also include milk.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (Remarks, page 7, paragraph 4) it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicant's argument is not convincing as obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As the references of record were published before the time the invention was made, the references of record would be knowledge generally available to one of ordinary skill in the art at the time the invention was made and thus the knowledge contained therein would be available to one of ordinary skill in the art. Furthermore, the fact that all the references used in the rejection have publication dates before the filing date of applicant's application indicates that the emulsifier combination as claimed was known in the art and to modify the primary reference to include emulsifier combinations taught in secondary references to obtain the benefits taught would have been readily apparent to one skilled in the art. The rejection is not based on hindsight if the knowledge is obtained from the teaching of the prior art. Applicant has not presented any concrete reasoning or evidence to show why one skilled in the art would not have made the modification as set forth in the rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/  
Examiner  
Art Unit 1781

/Keith D. Hendricks/  
Supervisory Patent Examiner, Art Unit 1781